FIG. 1

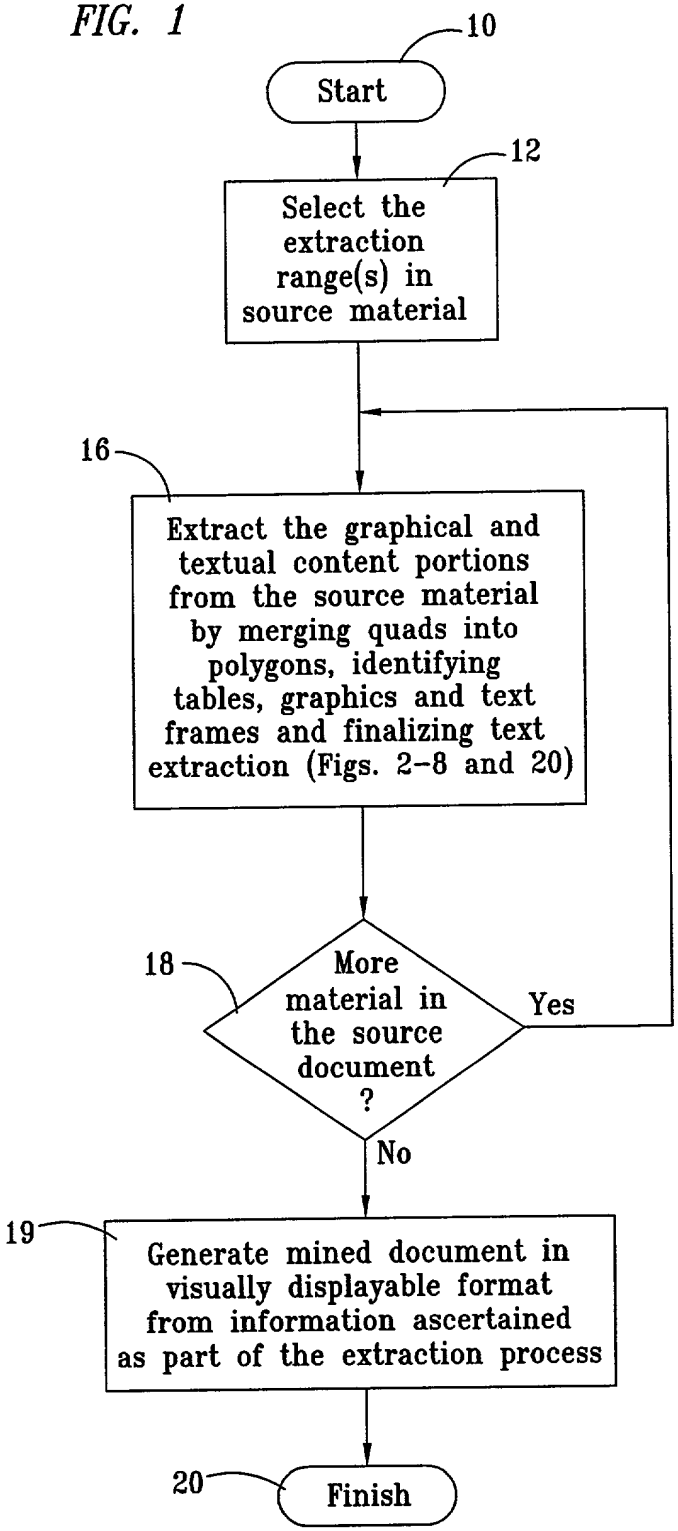

10
Start
12
Select the extraction range(s) in source material
16
Extract the graphical and textual content portions from the source material by merging quads into polygons, identifying tables, graphics and text frames and finalizing text extraction (Figs. 2–8 and 20)
18
More material in the source document ?
Yes
No
19
Generate mined document in visually displayable format from information ascertained as part of the extraction process
20
Finish

FIG. 2

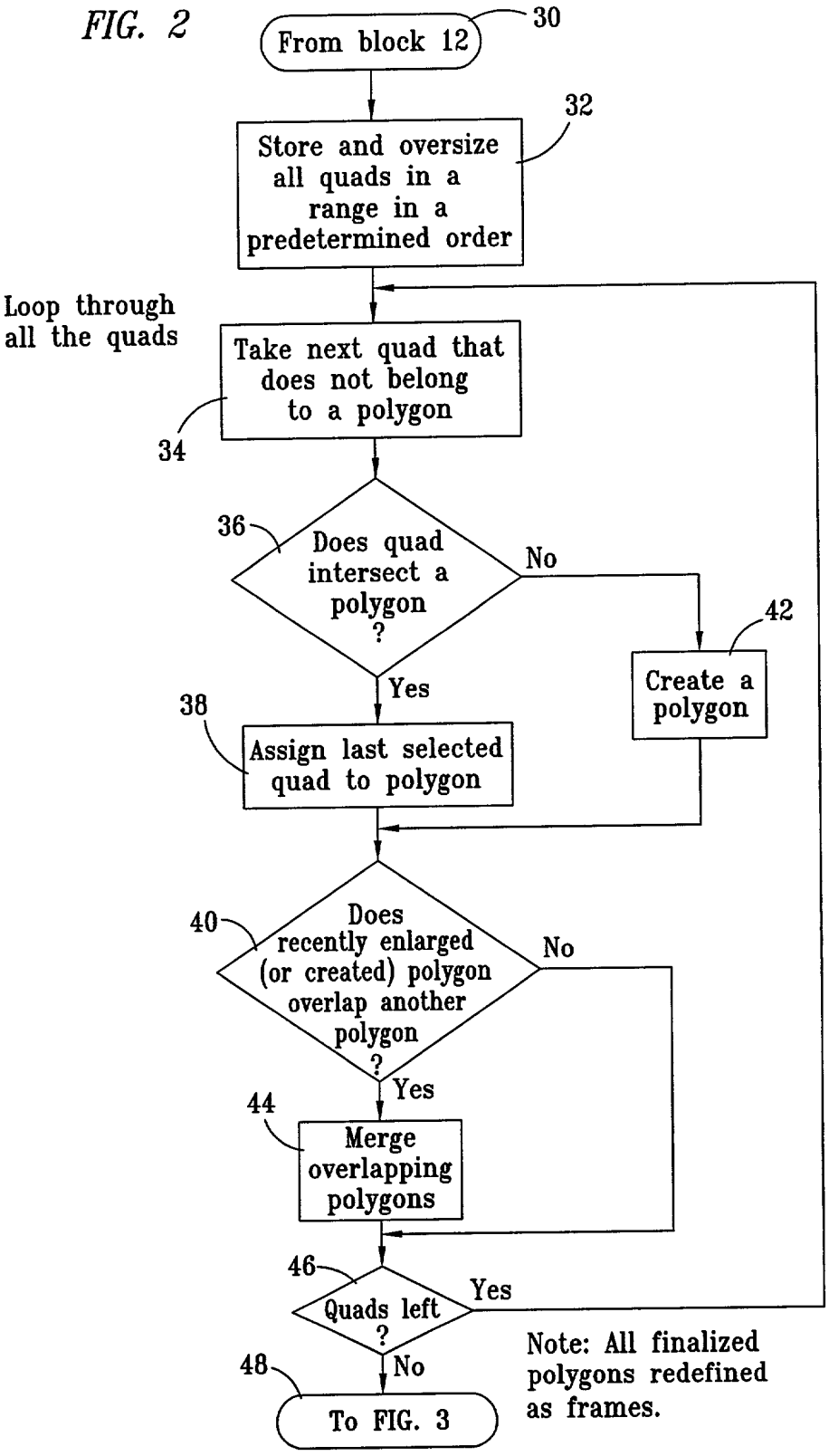

From block 12
30
Store and oversize all quads in a range in a predetermined order
32
Loop through all the quads
Take next quad that does not belong to a polygon
34
Does quad intersect a polygon ?
36
No
Yes
Create a polygon
42
Assign last selected quad to polygon
38
Does recently enlarged (or created) polygon overlap another polygon ?
40
No
Yes
Merge overlapping polygons
44
Quads left ?
46
Yes
No
To FIG. 3
48
Note: All finalized polygons redefined as frames.

FIG. 3

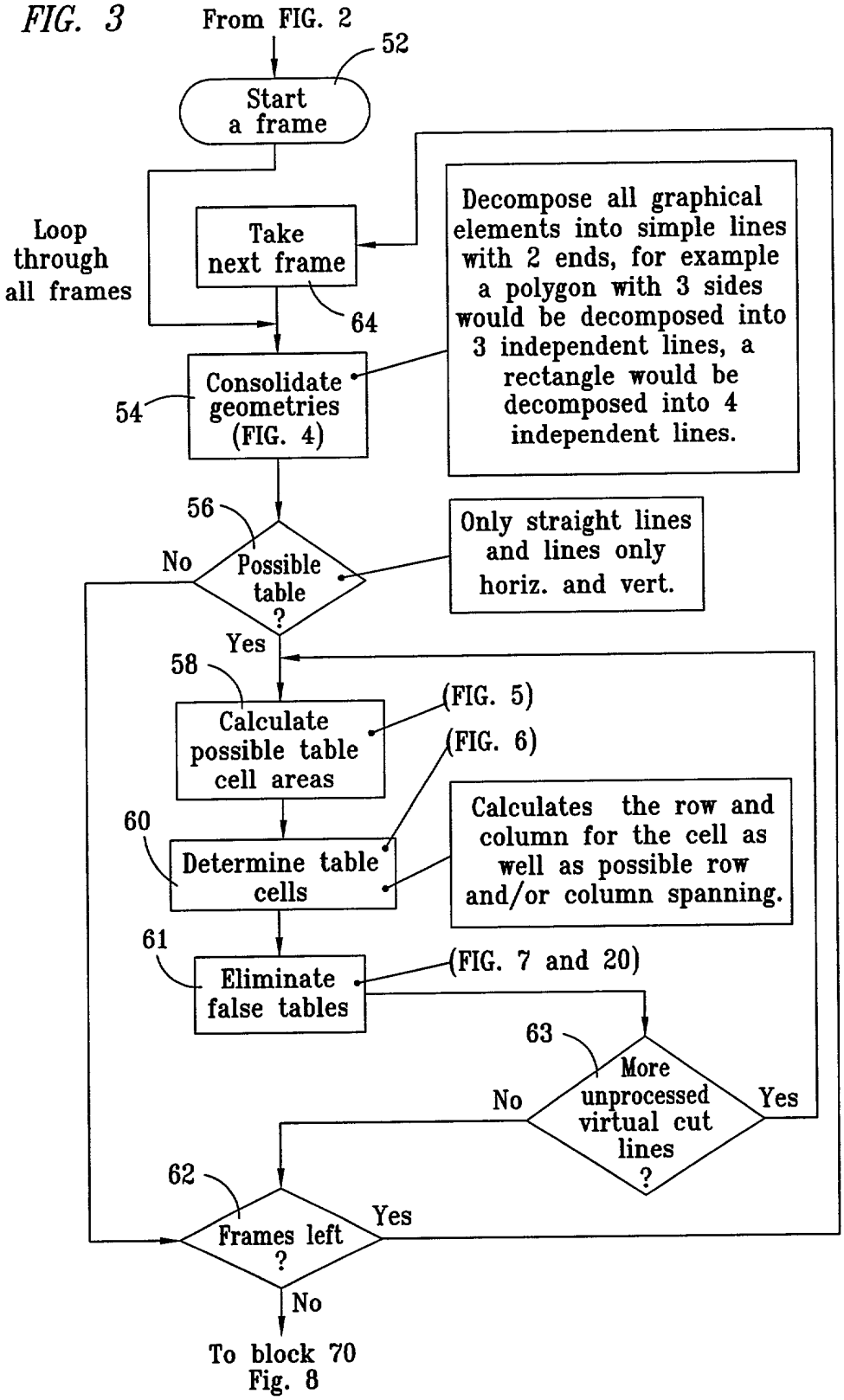

From FIG. 2
52
Start a frame
Loop through all frames
Take next frame
64
Decompose all graphical elements into simple lines with 2 ends, for example a polygon with 3 sides would be decomposed into 3 independent lines, a rectangle would be decomposed into 4 independent lines.
54
Consolidate geometries (FIG. 4)
56
No
Possible table ?
Only straight lines and lines only horiz. and vert.
Yes
58
Calculate possible table cell areas
(FIG. 5)
(FIG. 6)
60
Determine table cells
Calculates the row and column for the cell as well as possible row and/or column spanning.
61
Eliminate false tables
(FIG. 7 and 20)
63
No
More unprocessed virtual cut lines ?
Yes
62
Frames left ?
Yes
No
To block 70
Fig. 8

FIG. 4

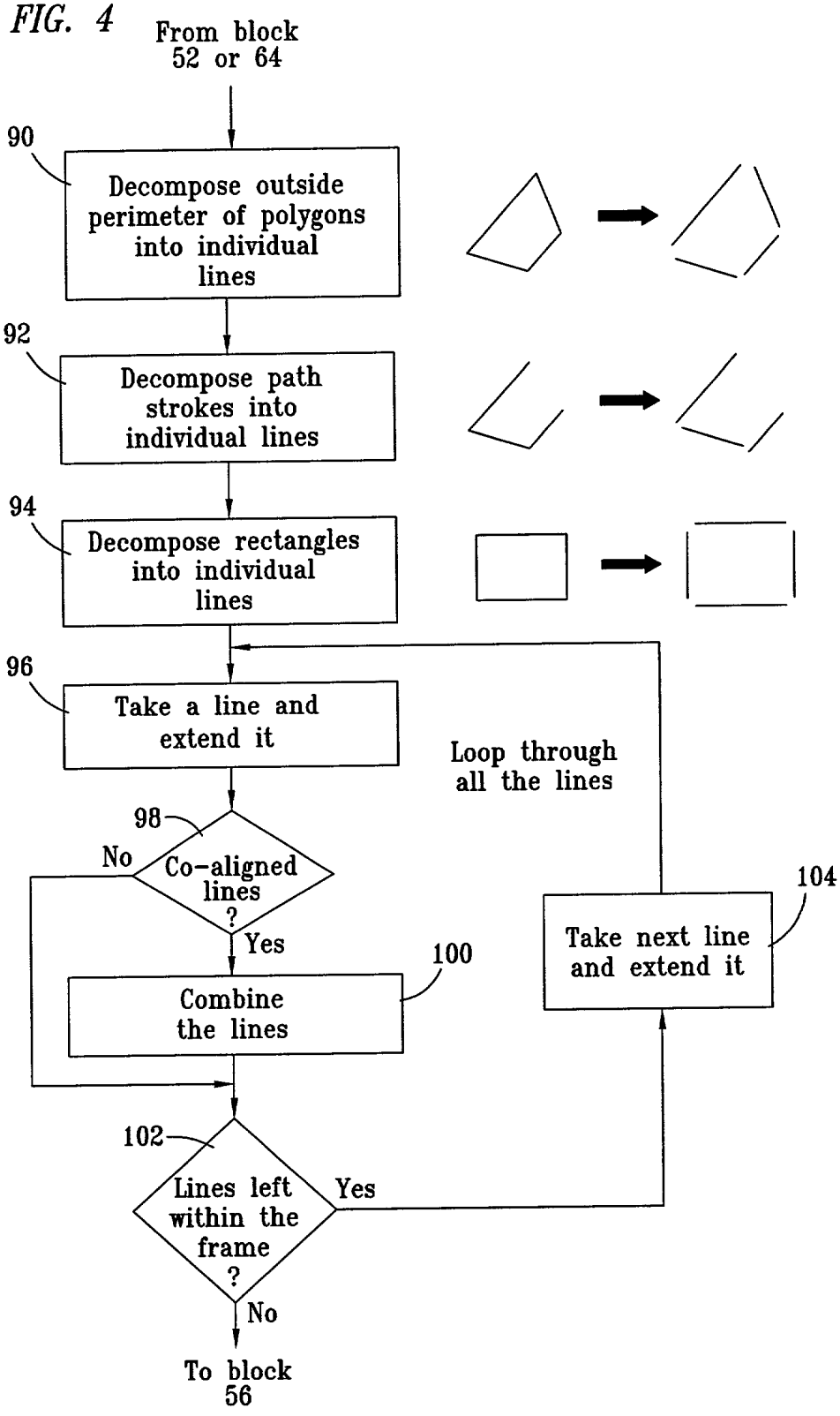

From block 52 or 64
90
Decompose outside perimeter of polygons into individual lines
92
Decompose path strokes into individual lines
94
Decompose rectangles into individual lines
96
Take a line and extend it
98
Co-aligned lines ?
No
Yes
100
Combine the lines
102
Lines left within the frame ?
Yes
No
To block 56
Loop through all the lines
104
Take next line and extend it

FIG. 5

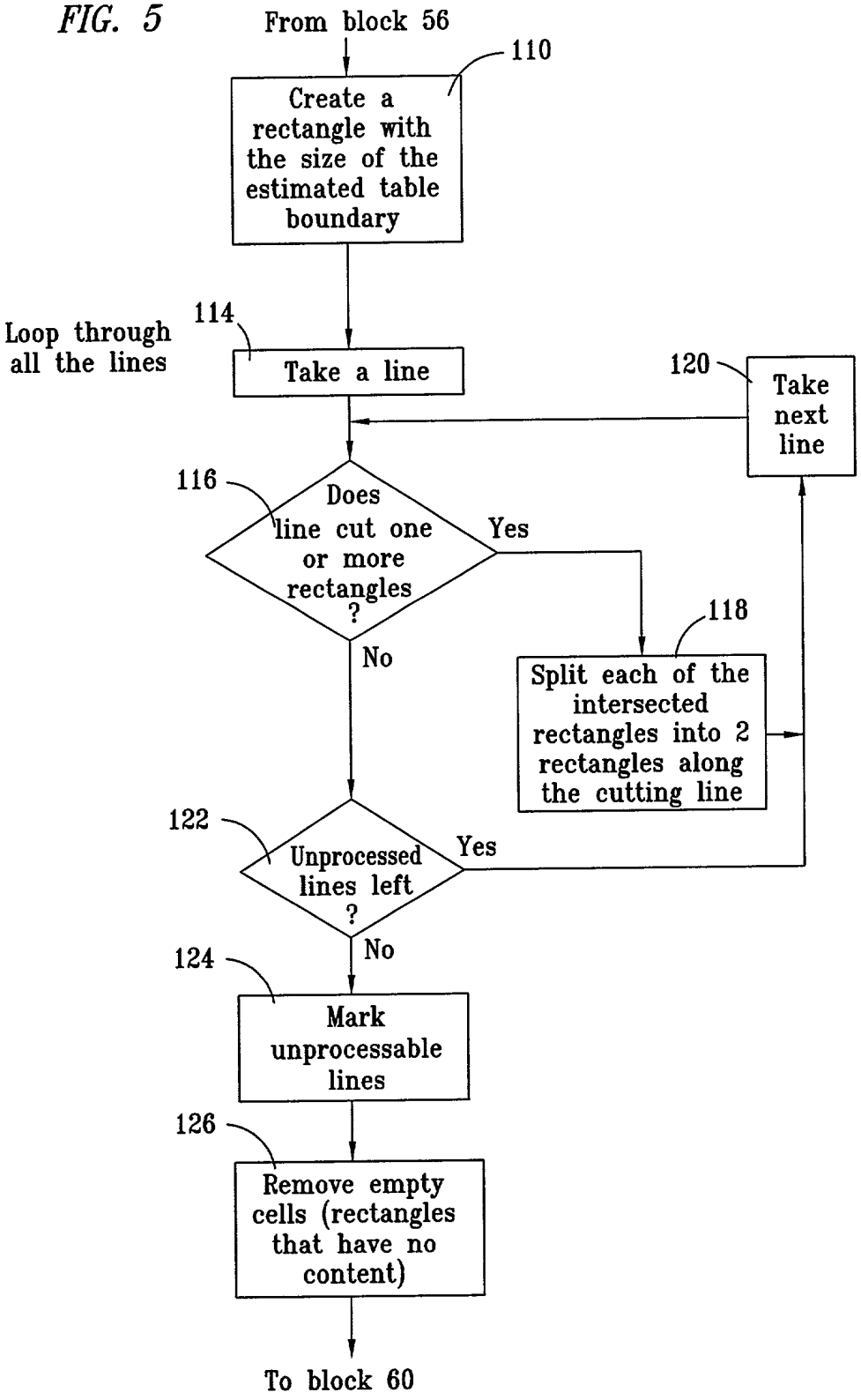

From block 56
110
Create a rectangle with the size of the estimated table boundary
Loop through all the lines
114
Take a line
120
Take next line
116
Does line cut one or more rectangles ?
Yes
No
118
Split each of the intersected rectangles into 2 rectangles along the cutting line
122
Unprocessed lines left ?
Yes
No
124
Mark unprocessable lines
126
Remove empty cells (rectangles that have no content)
To block 60

FIG. 6

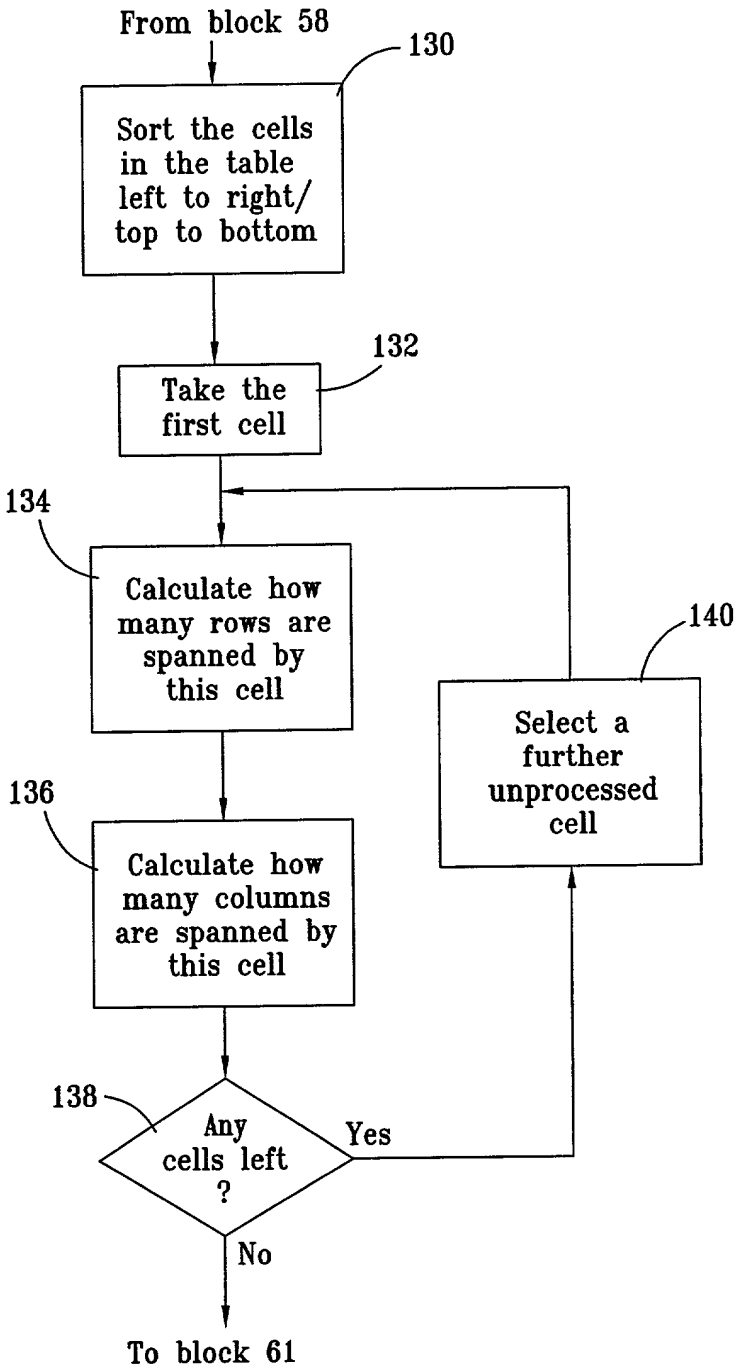

From block 58
130
Sort the cells in the table left to right/ top to bottom
132
Take the first cell
134
Calculate how many rows are spanned by this cell
136
Calculate how many columns are spanned by this cell
138
Any cells left ?
Yes
No
140
Select a further unprocessed cell
To block 61

FIG. 7

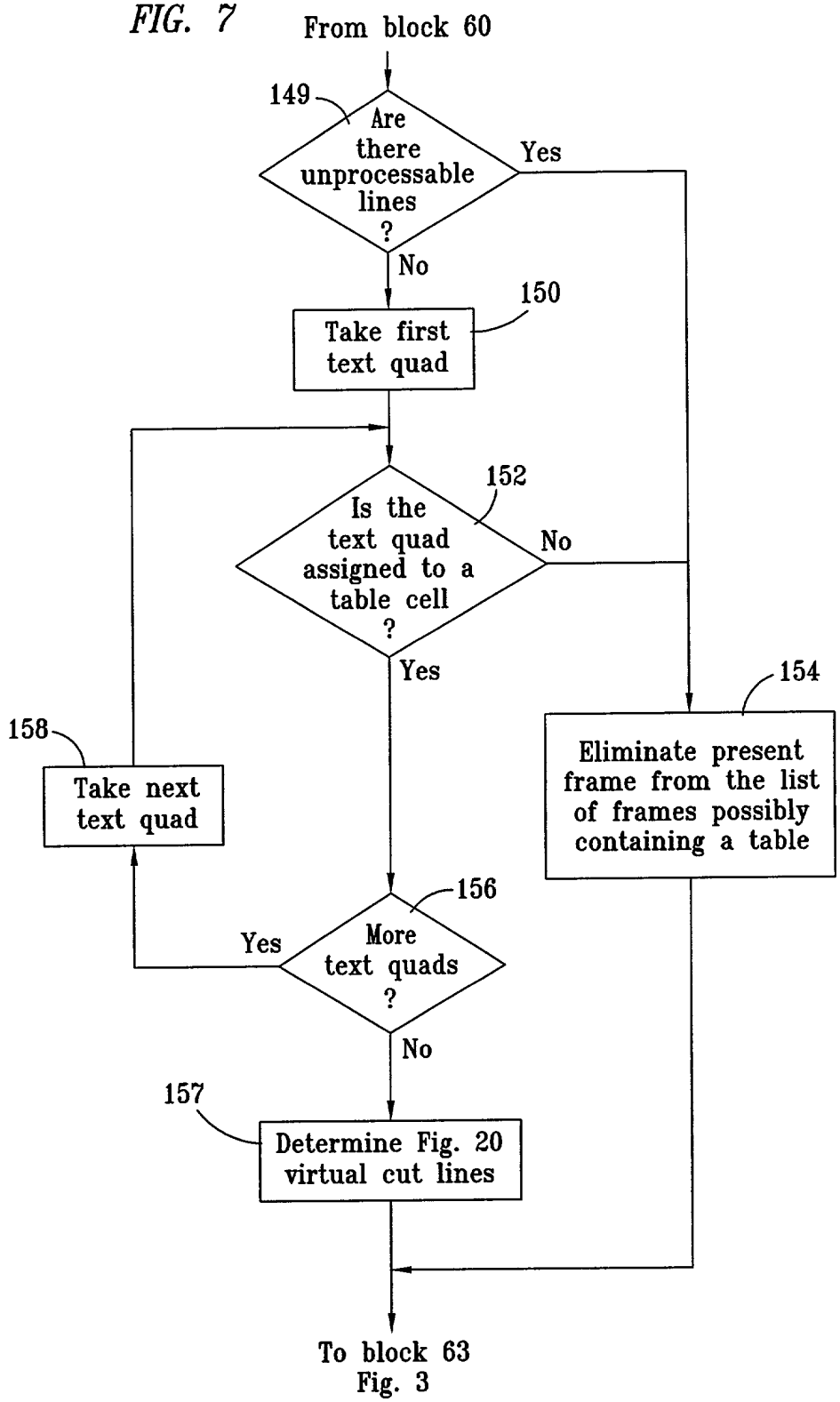

From block 60
149
Are there unprocessable lines ?
Yes
No
150
Take first text quad
152
Is the text quad assigned to a table cell ?
No
Yes
154
Eliminate present frame from the list of frames possibly containing a table
158
Take next text quad
156
More text quads ?
Yes
No
157
Determine Fig. 20 virtual cut lines
To block 63
Fig. 3

FIG. 8

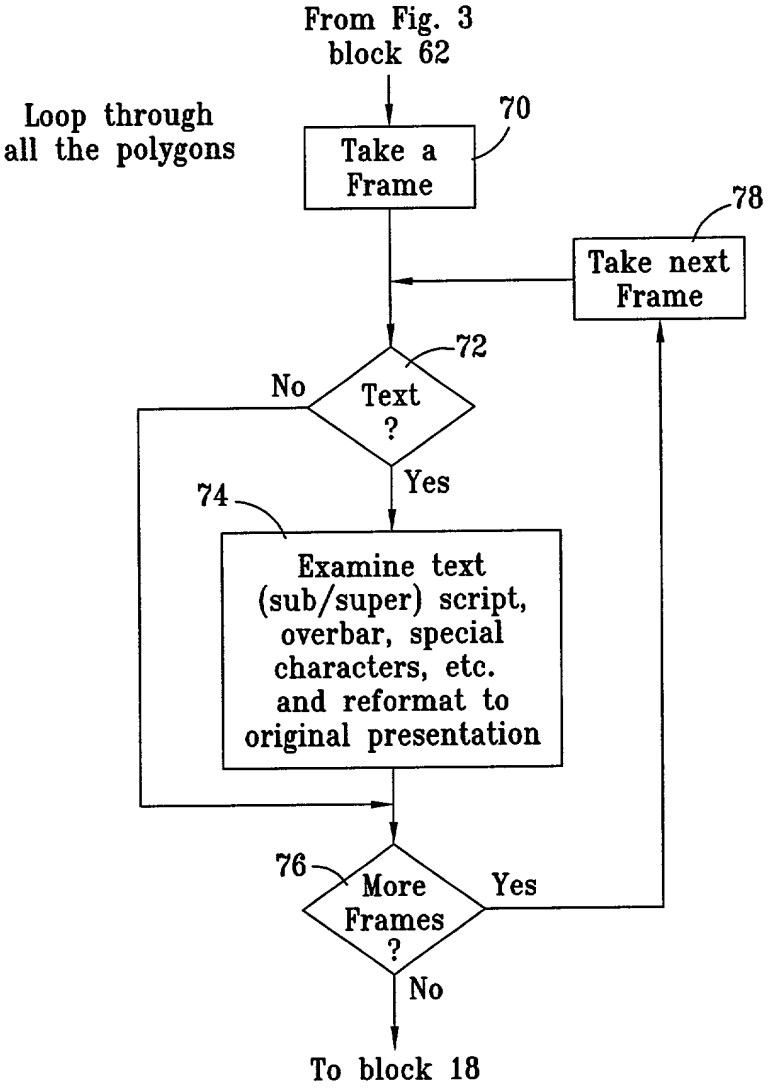
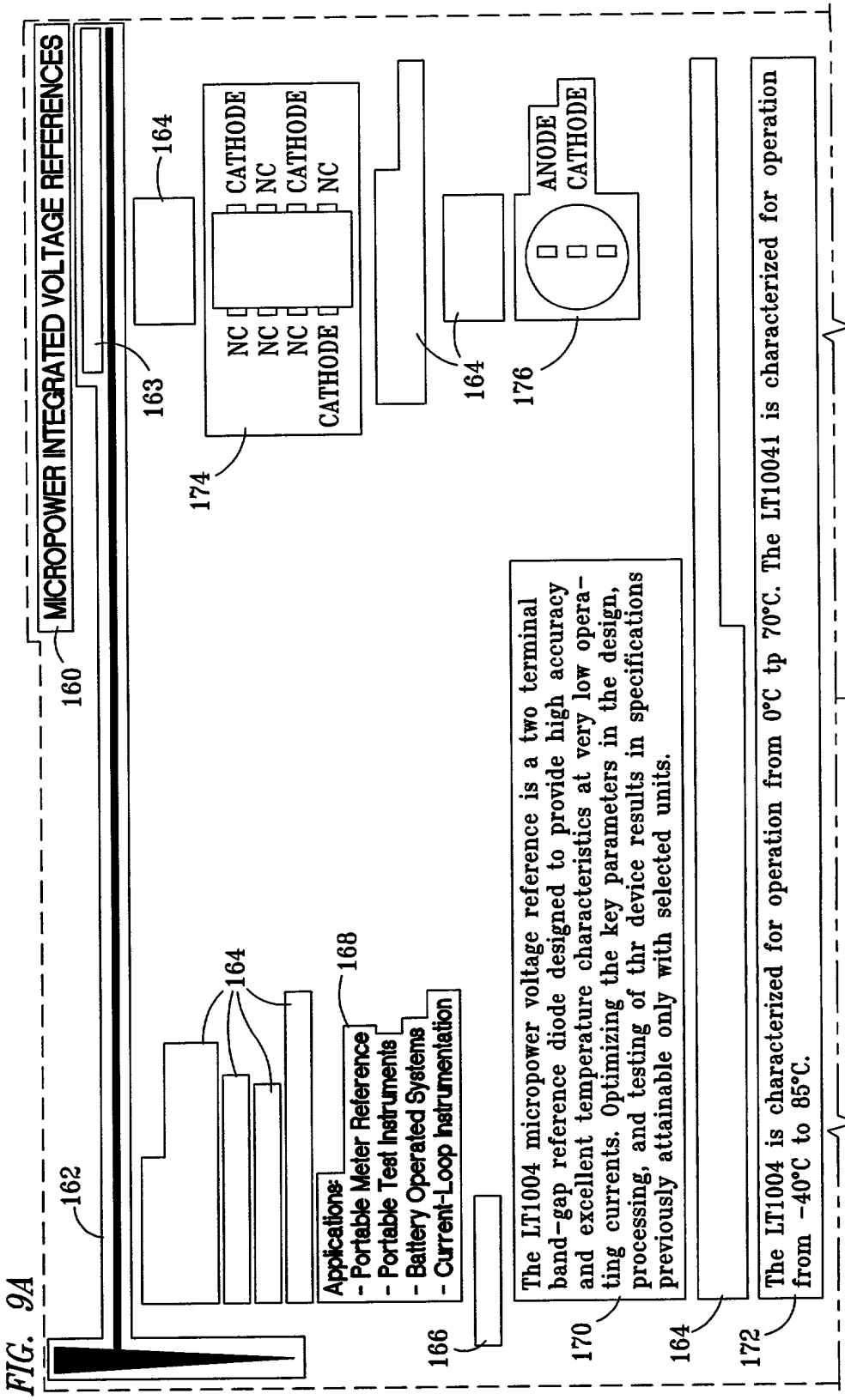
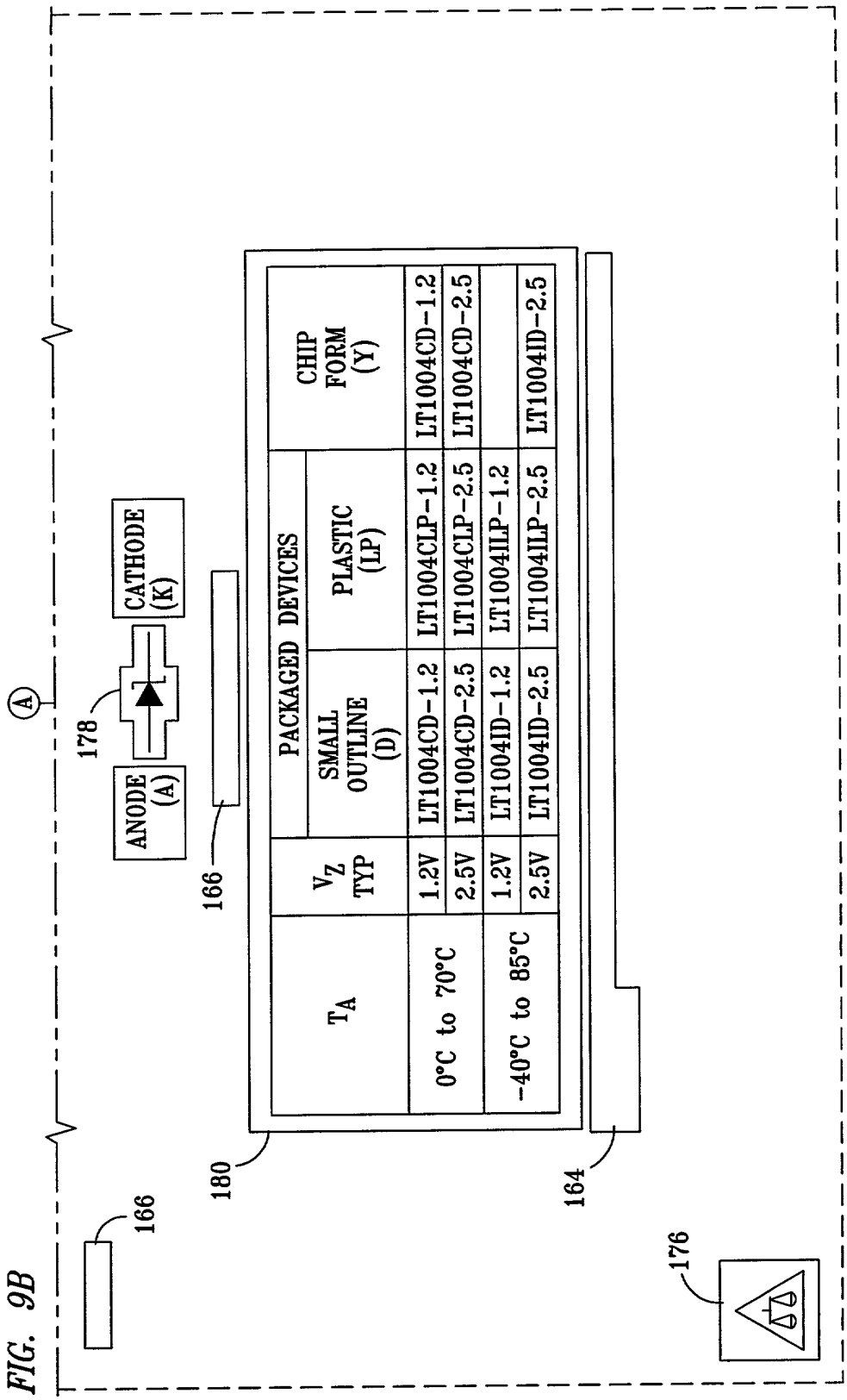

From Fig. 3
block 62
Loop through
all the polygons
70
Take a
Frame
78
Take next
Frame
72
No
Text
?
Yes
74
Examine text
(sub/super) script,
overbar, special
characters, etc.
and reformat to
original presentation
76
More
Frames
?
Yes
No
To block 18

FIG. 9A


MICROPOWER INTEGRATED VOLTAGE REFERENCES
160
162
163
164
164
164
168
174
176
NC
NC
NC
CATHODE
CATHODE
NC
CATHODE
NC
ANODE
CATHODE
Applications:
- Portable Meter Reference
- Portable Test Instruments
- Battery Operated Systems
- Current-Loop Instrumentation
166
The LT1004 micropower voltage reference is a two terminal band-gap reference diode designed to provide high accuracy and excellent temperature characteristics at very low operating currents. Optimizing the key parameters in the design, processing, and testing of thr device results in specifications previously attainable only with selected units.
170
164
The LT1004 is characterized for operation from 0°C tp 70°C. The LT10041 is characterized for operation from -40°C to 85°C.
172
A



T_A	V_Z TYP	PACKAGED DEVICES		CHIP FORM (Y)
		SMALL OUTLINE (D)	PLASTIC (LP)	
0°C to 70°C	1.2V	LT1004CD-1.2	LT1004CLP-1.2	LT1004CD-1.2
	2.5V	LT1004CD-2.5	LT1004CLP-2.5	LT1004CD-2.5
-40°C to 85°C	1.2V	LT1004ID-1.2	LT1004ILP-1.2	
	2.5V	LT1004ID-2.5	LT1004ILP-2.5	LT1004ID-2.5

FIG. 9B

FIG. 10

T_A	V_Z TYP	PACKAGED DEVICES		CHIP FORM (Y)
		SMALL OUTLINE (D)	PLASTIC (LP)	
0°C to 70°C	1.2V	LT1004CD-1.2	LT1004CLP-1.2	LT1004CD-1.2
	2.5V	LT1004CD-2.5	LT1004CLP-2.5	LT1004CD-2.5
-40°C to 85°C	1.2V	LT1004ID-1.2	LT1004ILP-1.2	
	2.5V	LT1004ID-2.5	LT1004ILP-2.5	LT1004ID-2.5

FIG. 11

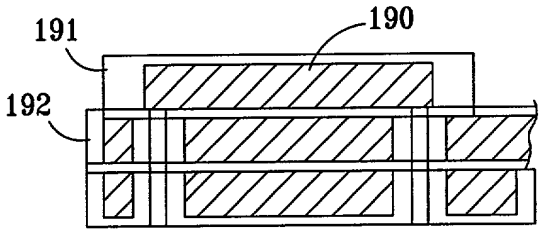


FIG. 12

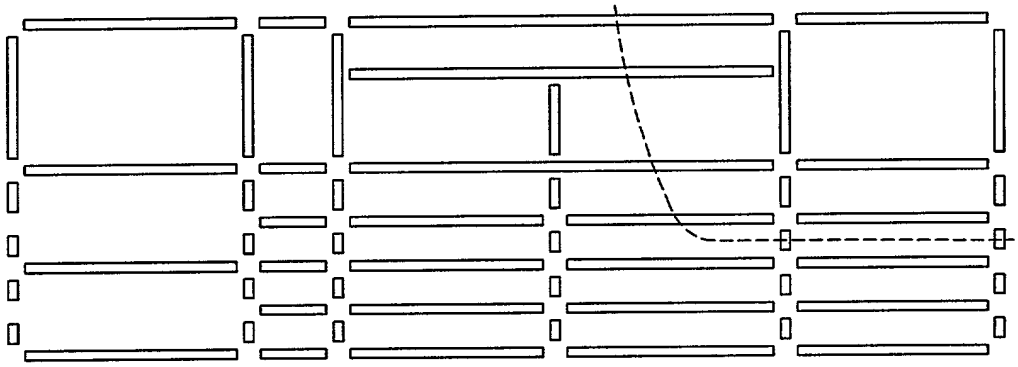


FIG. 13

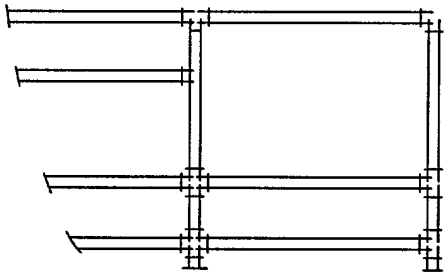


FIG. 14

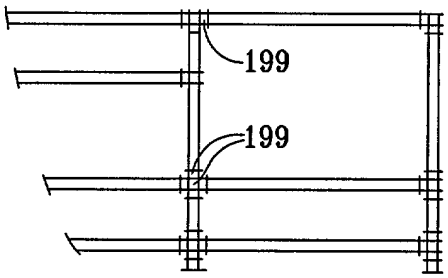


FIG. 15

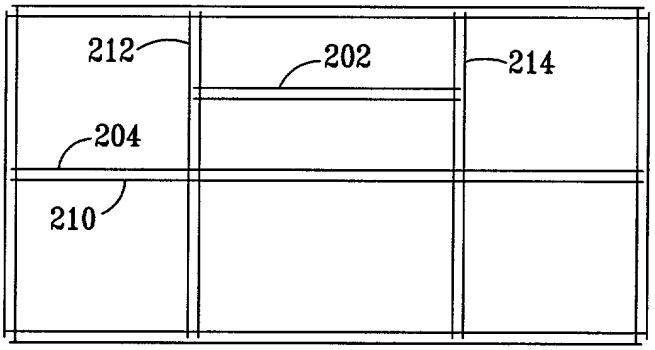


FIG. 16

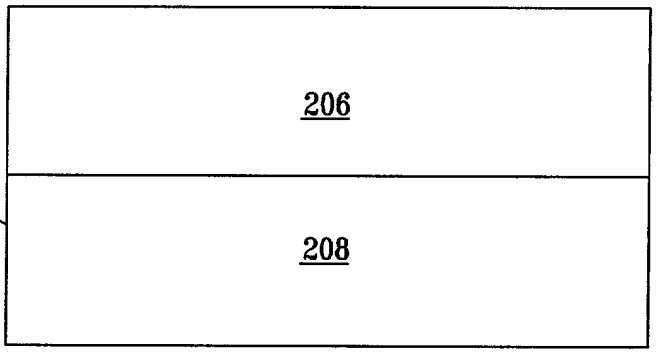


FIG. 17

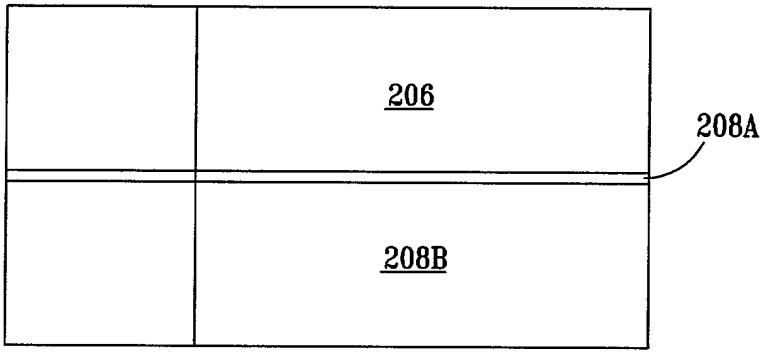


FIG. 18

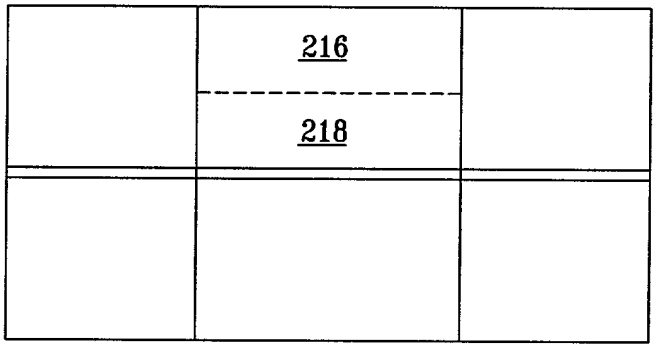


FIG. 19

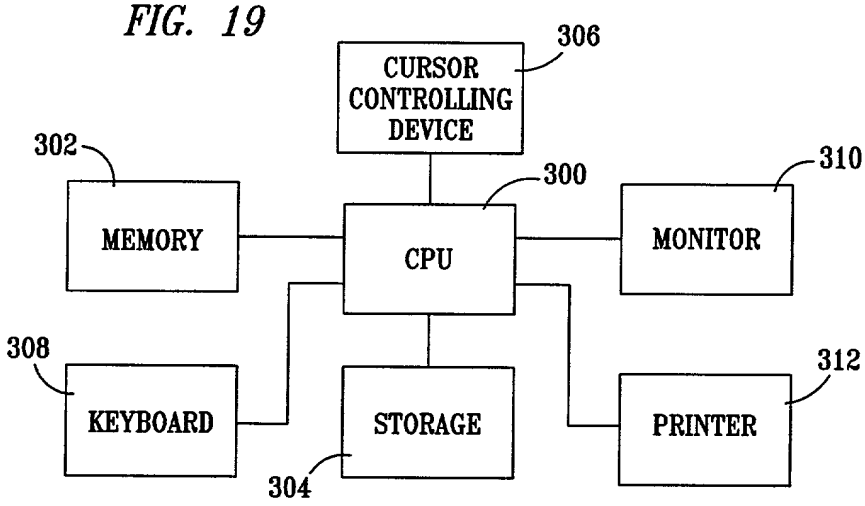


FIG. 20

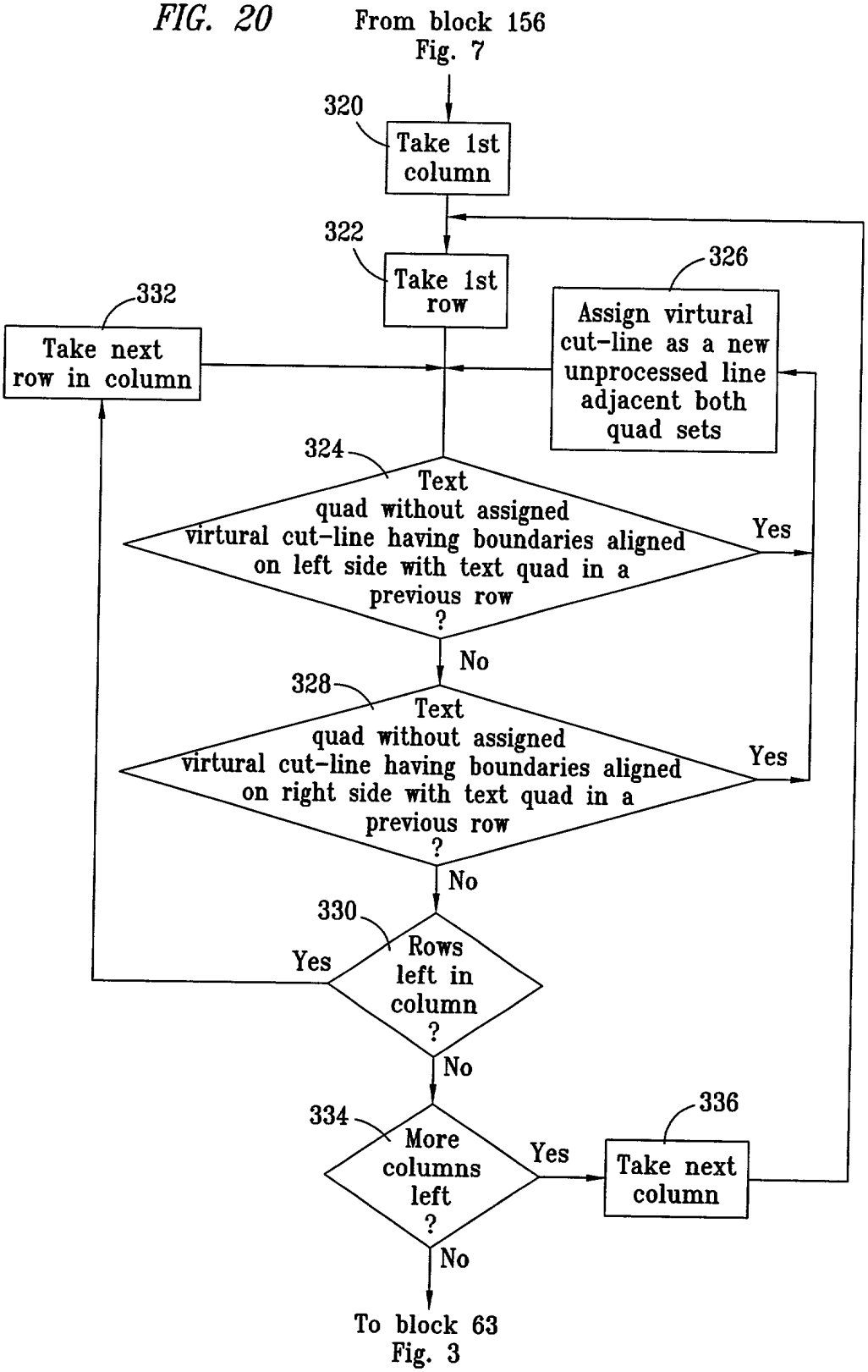

From block 156
Fig. 7
320
Take 1st column
322
Take 1st row
326
Assign virtural cut-line as a new unprocessed line adjacent both quad sets
332
Take next row in column
324
Text quad without assigned virtural cut-line having boundaries aligned on left side with text quad in a previous row ?
Yes
No
328
Text quad without assigned virtural cut-line having boundaries aligned on right side with text quad in a previous row ?
Yes
No
330
Rows left in column ?
Yes
No
334
More columns left ?
Yes
336
Take next column
No
To block 63
Fig. 3

FIG. 21

	PARAMETER	TEST CONDITIONS	LT1004Y-1.2 MIN	LT1004Y-1.2 TYP	LT1004Y-1.2 MAX	LT1004Y-2.5 MIN	LT1004Y-2.5 TYP	LT1004Y-2.5 MAX	UNIT
V_Z	Reference voltage	I_Z = 100 µA	1.231	1.235	1.239	2.48	2.5	2.52	V
α_{V_Z}	Average temperature coefficient of reference voltage†	I_Z = 10 µA		20					ppm/°C
		I_Z = 20 µA					20		
$\Delta V_Z/\Delta t$	Long-term change in reference voltage	I_Z = 100 µA		20			20		ppm/khr
I_Z (min)	Minimum reference current			8			12		µA

350 352 354 356